09/833,780
Out 10/7/07

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE ◈ **IEEE**

Membership   Publications/Services   Standards   Conferences   Careers/Jobs

IEEE *Xplore*®
RELEASE 1.5

Welcome
United States Patent and Trademark Office

Help   FAQ   Terms   Quick Links   ▼   **» Advanced Search**
IEEE Peer Review

Welcome to IEEE *Xplore*

○ Home
○ What Can
   I Access?
○ Log-out

Tables of Contents

○ Journals
   & Magazines
○ Conference
   Proceedings
○ Standards

Search

○ By Author
○ Basic
○ Advanced

Member Services

○ Join IEEE
○ Establish IEEE
   Web Account
○ Access the
   IEEE Member
   Digital Library

1) Enter a single keyword, phrase, or Boolean expression. Example: acoustic imaging (means the phrase acoustic imaging plus any stem variations)
2) Limit your search by using search operators and field codes, if desired.
Example: optical (fiber fibre) ti
3) Limit the results by selecting Search Options.
4) Click Search. See Search Examples

```
soft <near/1> (pvc <or> "permanent
virtuai circuit")
```

Start Search   **Clear**

Note: This function returns plural and suffixed forms of the keyword(s).

Search operators: More

Field codes: au (author), ti (title), ab (abstract), jn (publication name), de (index term) More

Search Options:
Select publication types:
☑ IEEE Journals
☑ IEE Journals
☑ IEEE Conference proceedings
☑ IEE Conference proceedings
☑ IEEE Standards

Select years to search:
From year: [All   ▼] to
[Present ▼]

Organize search results by:
Sort by: [Year   ▼]
In: [Descending ▼] order
List [15 ▼] Results per page

Home | Log-out | Journals | Conference Proceedings | Standards | Search by Author | Basic Search | Advanced Search
Join IEEE | Web Account | New this week | OPAC Linking Information | Your Feedback | Technical Support | Email Alerting No Robots Please |
Release Notes | IEEE Online Publications | Help | FAQ| Terms | Back to Top

◆IEEE

Membership   Publications/Services   Standards   Conferences   Careers/Jobs

IEEE Xplore®
RELEASE 1.5

Welcome
United States Patent and Trademark Office

Help   FAQ   Terms   IEEE   Quick Links   [▽]

» Search Results

Peer Review

Welcome to IEEE Xplore*

○ Home
○ What Can
   I Access?
○ Log-out

Tables of Contents

○ Journals
   & Magazines
○ Conference
   Proceedings
○ Standards

Search

○ By Author
○ Basic
○ Advanced

Member Services

○ Join IEEE
○ Establish IEEE
   Web Account
○ Access the
   IEEE Member
   Digital Library

🖶 Print Format

Your search matched **275** of **974314** documents.

A maximum of **275** results are displayed, **25** to a page, sorted by **publication year** in **descending** order.
You may refine your search by editing the current search expression or entering a new one the text box.
Then click **Search Again.**

DSL

Search Again

Results:
Journal or Magazine = **JNL**   Conference = **CNF**   Standard = **STD**

---

1 **Dream of tomorrows' broadband multimedia pipeline**
Gajda, B.; Rajaravivarma, V.;
System Theory, 2003. Proceedings of the 35th Southeastern
Symposium on , 16-18 March 2003
Page(s): 24 -28

[Abstract]   [PDF Full-Text (478 KB)] **IEEE CNF**

---

2 **Next generation dsl: single-chip adsl+ and ldsl for home networks**
Chow, P.S.; Santini, W.A.;
Consumer Electronics, 2003. ICCE. 2003 IEEE International
Conference on , June 17-19, 2003
Page(s): 304 -305

[Abstract]   [PDF Full-Text (225 KB)] **IEEE CNF**

---

3 **Efficient implementation of discrete wavelet multitone in DSL communications**
Couturier-Doux, V.; Lienard, J.; Conq, B.; Gallay, P.;
Video/Image Processing and Multimedia Communications, 2003. 4th
EURASIP Conference focused on , Volume: 1 , 2-5 July 2003
Page(s): 393 -398

[Abstract]   [PDF Full-Text (360 KB)] **IEEE CNF**

---

4 **A byte-erasure method for improved impulse immunity in DSL systems using soft information from an inner code**

IEEE HOME I SEARCH IEEE I SHOP I WEB ACCOUNT I CONTACT IEEE

⬧IEEE

| Membership | Publications/Services | Standards | Conferences | Careers/Jobs |

IEEE Xplore®
RELEASE 1.5

Welcome
United States Patent and Trademark Office

Help   FAQ   Terms   IEEE   Quick Links   ▼   **» Search Results**
Peer Review

Welcome to IEEE Xplore®

- Home
- What Can I Access?
- Log-out

Tables of Contents

- **Journals & Magazines**
- **Conference Proceedings**
- **Standards**

Search

- By Author
- Basic
- Advanced

Member Services

- Join IEEE
- Establish IEEE Web Account
- Access the IEEE Member Digital Library

🖨 Print Format

Your search matched **1** of **974953** documents.

A maximum of **1** results are displayed, **15** to a page, sorted by **publication year** in **descending** order.
You may refine your search by editing the current search expression or entering a new one the text box.
Then click **Search Again.**

((permanent <near/1> virtual <near/1> circuit) <or> pvc) <and> (timer* <or> counter*

Search Again

Results:
Journal or Magazine = **JNL**   Conference = **CNF**   Standard = **STD**

---

1 **On some implementation issues for value prediction on wide-issue ILP processors**
Sang-Jeong Lee; Pen-Chung Yew;
Parallel Architectures and Compilation Techniques, 2000.
Proceedings. International Conference on , 15-19 Oct. 2000
Page(s): 145 -156

[Abstract]   [PDF Full-Text (1048 KB)] **IEEE CNF**

Home | Log-out | Journals | Conference Proceedings | Standards | Search by Author | Basic Search | Advanced Search
Join IEEE | Web Account | New this week | OPAC Linking Information | Your Feedback | Technical Support | Email Alerting
No Robots Please | Release Notes | IEEE Online Publications | Help | FAQ| Terms | Back to Top

An overview of broad-band access technologies

Gagnaire, M.
Ecole Nat. Superieure des Telecommun., Paris;
This paper appears in: **Proceedings of the IEEE**

Abstract:
The provision of broad-band services based on either the Internet or the asynchronous transfer mode (ATM) technique requires a new generation of access networks. In the short term, solutions such as x-digital subscriber line (DSL) and hybrid fiber coaxial (HFC), allowing the reuse of existing infrastructures look very promising. For the longer term, new infrastructures based either on radio or on optical access links seem preferable. Three x-DSL techniques aiming at high-bit-rate transmission over twisted pairs are presented: high-bit-rate DSL, asymmetrical DSL, and very-high-bit-rate DSL. An extension of existing cable television networks known as HFC is also described. Two other prospective approaches, wireless in the loop (WITL) and fiber in the loop (FITL), are then presented. Several techniques are considered for WITL: digital enhanced cordless telecommunication local multipoint distribution service, wireless ATM, and low Earth orbit satellite constellations. The various architectural alternatives for the FITL approach are discussed, a special interest being dedicated to the synchronous digital hierarchy self-healing loop and the ATM over a passive optical network. We mention the main experiments and the standardization activities inherent to the domain

Index Terms:
Internet asynchronous transfer mode broadband networks cable television cordless telephone systems digital communication optical fibre subscriber loops radio links reviews satellite communication subscriber loops synchronous digital hierarchy twisted pair cables DECT FITL Internet LMDS WITL asymmetrical DSL asynchronous transfer mode technique broad-band access cable television networks digital enhanced cordless telecommunication local multipoint distribution service fiber in the loop high-bit-rate DSL high-bit-rate transmission hybrid fiber coaxial sytem infrastructures low Earth orbit satellite constellations optical access links overview passive optical network radio access links synchronous digital hierarchy self-healing loop twisted pairs very-high-bit-rate DSL wireless ATM wireless in the loop x-DSL x-digital subscriber line

Documents that cite this document
Select link to view other documents in the database that cite this one.

Reference list:

1. F. M.Fenton, J. D.Sipes, “Architectural trends in access: An overview,” *Bell Labs Tech. J.*, vol. 1, no. 1, pp. 3-10, June 1996.
[CrossRef]

2. I.Kalet, S.Shamai, “On the capacity of a twisted-wire pair: Gaussian model,” *IEEE Trans. Commun.*, vol. 38, no. 3, pp. 379-383, Mar. 1990.
[Abstract] [PDF Full-Text (412KB)]

3. V. B.Lawrence, L. J.Smithwick, J. J.Werner, “Broadband access to the home on copper,” *Bell Labs Tech. J.*, vol. 1, no. 1, pp. 100-114, June 1996.
[CrossRef]

4. J.-J.Werner, “The HDSL environment,” *IEEE J. Select. Areas Commun.*, vol. 9, no. 6, pp. 785-800, Aug. 1991.
[Abstract] [PDF Full-Text (1548KB)]

5. G. D.Forney, L.Brown, J. L.Moran, “The V.34 high-speed modem standard,” *IEEE Commun. Mag.*, vol. 34, pp. 28-33, Dec. 1996.
[Abstract] [PDF Full-Text (2032KB)]

6. P.Humblet, M. G.Troulis, “The information driveway,” *IEEE Commun. Mag.*, vol. 34, pp. 64-68, Dec. 1996.
[Abstract] [PDF Full-Text (2512KB)]

7. K.Maxwell, “Asymmetrical digital subscriber line: Interim technology for the next forty years,” *IEEE Commun. Mag.*, vol. 34, pp. 100-106, Oct. 1996.
[Abstract] [PDF Full-Text (1124KB)]

8. W. Y.Chen, “Broadcast digital subscriber line,” *IEEE J. Selected Areas Commun.*, vol. 13, pp. 1550-1557, Dec. 1995.
[Abstract] [PDF Full-Text (688KB)]

9. D. L.Waring, J. W.Lechleider, T. R.Hsing, “Digital subscriber line technology facilitates a graceful transition from copper to fiber,” *IEEE Commun. Mag.*, vol. 29, pp. 96-103, Mar. 1991.
[Abstract] [PDF Full-Text (1404KB)]

10. S. V.Ahamed, P. L.Gruber, J. J.Werner, “Digital subscriber line (HDSL and ADSL) capacity of the outside loop plant,” *IEEE J. Select. Areas Commun.*, vol. 13, pp. 1540-1549, Dec. 1995.
[Abstract] [PDF Full-Text (944KB)]

11. J. W.Leichleider, “Line codes for digital subscriber lines,” *IEEE Commun. Mag.*, vol. 27, pp. 25-32, Sept. 1989.
[Abstract] [PDF Full-Text (744KB)]

12. W. Y.Chen, D. L.Waring, “ADSL noise environment and potential system performance,” *Proc. Supercomm/ICC'94* New Orleans, LA, pp. 451-455, 1994.

13. P. S.Chow, J. M.Cioffi, “A multi-drop in-house ADSL distribution network,” *Proc. Supercomm/ICC'94* New Orleans, LA, pp. 456-460, 1994.
[Abstract] [PDF Full-Text (400KB)]

14. S. V.Ahamed, P. P.Bohn, N. L.Gottfried, “A tutorial on two-wire digital transmission in the loop plant,” *IEEE Trans. Commun.*, vol. COM-29, pp. 1554-1564, Nov. 1981.

15. N. J.Frigo, “Local access optical networks,” *IEEE Network Mag.*, vol. 10, pp. 32-36, Nov./Dec. 1996.
[Abstract] [PDF Full-Text (1260KB)]

16. R. L.Townsend, J. J.Werner, M.-H.Nguyen, “Using technology to bring ATM to the desktop,” *AT&T Tech. J.*, pp. 25-37, July/Aug. 1995.

17. J. W.Lechleider, “High bit rate digital subscriber lines: A review of HDSL progress,” *IEEE J. Select. Areas Commun.*, vol. 9, pp. 769-784, Aug. 1991.
[Abstract] [PDF Full-Text (1676KB)]

18. B.Carruthers, S.Czarnecki, G.Mandanis, “MMDS: A low-cost infrastructure for video, voice and data,” *Telecommun. Mag.*, vol. 30, no. 3, pp. 103-110, Mar. 1996.

19. G.-H.Im, J. J.Werner, “Bandwidth-efficient digital transmission over unshielded twisted-pair wiring,” *IEEE J. Select. Areas Commun.*, vol. 13, pp. 1643-1655, Dec. 1995.
[Abstract] [PDF Full-Text (1124KB)]

20. *Digital broadcasting systems for television, sound and data services: Framing structure, channel coding and modulation for multipoint mutichannel distribution systems (MMDS) below 10 GHz*: European Telecommunications Standards Institute, Recommendation ETS 300 749, May 1996.

21. Digital Audio-Visual Council *Lower layer protocols and physical interfaces*, DAVIC 1.1 specification part 08, Revision 2.0, LMDS Baseline Doc. N17, June 21, 1996.

22. J. W.Lechleider, “Loop transmission aspects of ISDN basic access,” *IEEE J. Select. Areas Commun.*, vol. 4, pp. 1294-1300, Nov. 1986.

23. D. G.Messerschmitt, “Echo cancellation in speech and data transmission,” *IEEE J. Select. Areas Commun.*, vol. 2, pp. 283-296, Mar. 1984.

24. P. J.Van Gerwen, N. A. M.Verhoechx, T. A. C. M.Clausen, “Design considerations for a 144 kb/s digital transmission unit for the local telephone network,” *IEEE J. Select. Areas Commun.*, vol. 2, pp. 314-323, Mar. 1984.

25. S. A.Grzelak, H.Miles, E. S.Szurkowski, W. P.Weber, “Residential data services via hybrid fiber-coax local access networks,” *Bell Labs Tech. J.*, vol. 1, no. 1, pp. 88-99, June 1996.
[CrossRef]
26. G. I.Zysman, R.Thorkildsen, D. Y.Lee, “Two-way wireless broadband access,” *Bell Labs Tech. J.*, vol. 1, no. 1, pp. 115-129, June 1996.
[CrossRef]
27. J. G.Proakis, *Digital Communications*, 3rd ed. , New York: McGraw-Hill, 1995.

28. Radio Equipment and Systems *Digital enhanced cordless telecommunications (DECT), common interface*: European Telecommunications Standards Institute, Recommendation ETS 300 175, 1992.

29. L. P.Seidman, “Satellites for wideband access,” *IEEE Commun. Mag.*, vol. 34, pp. 108-111, Oct. 1996.
[Abstract] [PDF Full-Text (532KB)]

30. H.Flinsenberg, “Broadband network evolution,” *Telecommun. Mag.*, vol. 29, no. 2, pp. 30-37, Feb. 1995.

31. V. K.Garg, E. L.Sneed, “Digital wireless local loop system,” *IEEE Commun. Mag.*, vol. 34, pp. 112-115, Oct. 1996.
[Abstract] [PDF Full-Text (676KB)]

32. Digital Audio Visual Council (DAVIC) *1.0 Specifications*, Dec. 1995.

33. G.Van der Plas, C.Sierens, P.Spruyt, “Access network alternatives and associated technologies,” *Proc. ISSLS'96* Melbourne, Australia, 1996.

34. G.Van der Plas, “Technologies for optical access networks,” *Proc. OPNET'97 Conference* Paris, France, pp. 141-151, Jan. 28–29, 1997.

35. C.Bisdikian, B.McNeil, R.Norman, R.Zeisz, “MLAP: A MAC level access protocol for the HFC 802.14 network,” *IEEE Commun. Mag.*, vol. 34, pp. 114-121, Mar. 1996.
[Abstract] [PDF Full-Text (2340KB)]

36. J. E.Dail, M. A.Dajer, C.-C.Li, P. D.Magill, C. A.Siller, K.Sriram, N. A.Whitaker, “Adaptive digital access protocol: A MAC protocol for multiservice broadband access networks,” *IEEE Commun. Mag.*, vol. 34, pp. 104-112, Mar. 1996.
[Abstract] [PDF Full-Text (3964KB)]

37. T. H.Noh, “End-to-end self-healing SDH/ATM networks,” *Proc. IEEE Globecom Conference*, pp. 1877-1881, 1996.
[Abstract] [PDF Full-Text (492KB)]

38. *Asymmetrical digital subscriber line—ADSL*, ANSI

Standard T1.413, 1995.

39. *Very high bit rate digital subscriber line—VDSL*, ETSI Standard DTR/TM-06003, 1995.

40. N.Golmie, S.Masson, D.Su, “New packet admittance policies for IEEE 802.14 MAC protocols,” *Proc. OPNET'97 Conf.* Paris, France, pp. 223-228, Jan. 28–29, 1997.

41. P.Godlewski, “Radio-in-the-loop: An overview,” *Proc. OPNET'97 Conf.* Paris, France, pp. 91-100, Jan. 28–29, 1997.

42. S. D.Sandberg, M. A.Tzannes, “Overlapped discrete multitone modulation for high speed copper wire communications,” *IEEE J. Select. Areas Commun.*, vol. 13, no. 9, pp. 1571-1585, Dec. 1995.
[Abstract] [PDF Full-Text (1472KB)]

43. S.Stojanovski, M.Gagnaire, “A new wireless ATM access protocol for the local loop,” *Proc. 1st Int. Workshop Mobile and Wireless Communications Networks* Paris, France, pp. 127-132, May 14, 1997.

44. C. A.Eldering, “Customer premises equipments for residential broadband networks,” *IEEE Commun. Mag.*, vol. 35, pp. 114-121, June 1997.
[Abstract] [PDF Full-Text (1956KB)]

45. Y.-D.Lin, C.-J.Wu, W.-M.Yin, “PCUP: Pipelined cyclic upstream protocol over hybrid fiber coax,” *IEEE Network Mag.*, vol. 11, pp. 24-34, Jan./Feb. 1997.
[Abstract] [PDF Full-Text (5496KB)]

46. L. M.Correira, R.Prasad, “An overview of wireless broadband communications,” *IEEE Commun. Mag.*, vol. 35, pp. 28-33, Jan. 1997.
[Abstract] [PDF Full-Text (2076KB)]

47. J.Angelopoulos, E.Fragoulopoulos, R.Johnson, J.Koulouris, N.Lepidas, J.Senior, “Performance evaluation of the MAC protocol designed for the field trial of the ATM SuperPON access system PLANET,” *Proc. NOC'97 Conf.* Antwerpen, Belgium: IOS Press, vol. 1, pp. 173-180, 1997.